



MG2036 Computer Aided Manufacturing - CAM 6.0 credits

Datorstödd tillverkning - CAM

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Specific prerequisites

MG2028 Not Just CAD – IT Tools for Mechanical Engineers

MG1001 Manufacturing or
MG1006 Design and Product Realization - Manufacturing

or equivalent

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

Upon completion of this course, each student should be able to:

- using his/her own wording, describe a typical process planning process and explain how it can be supported by a CAM system
- using his/her own wording, describe how the terms of process planning, product development and product lifecycles are related
- explain the theory of process planning and show practical skills in using CAM
- show basic proficiency in the use of CAM software and apply those skills in creating a process plan and NC code for a part given as a CAD model

Course contents

Process and production planning, machine tool categories, CAM systems, machine model simulation, standards, process planning for small batch vs. mass production.

Disposition

Lectures, exercises, laboratory work, much of which has to be done outside classes

Course literature

Course literature: lecture notes, articles, exercises etc., will be published through Bilda throughout the course.

Examination

- INL1 - Assignment, 2.0 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory work, 1.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Other requirements for final grade

Laborations and homework assignments (LAB1; 3cr)

Technical Report (INL1; 3cr)

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.